

**WE CLAIM:**

1. A computerized method for diagnosing and defining actions for improvement in maintenance management comprising the steps of:

collecting data relating to maintenance usage and maintenance-related policies and practices in an automated data processing device;

using a defined set of characteristics for each of a plurality of levels of achievement to derive a diagnosis of maintenance management effectiveness, said diagnosis comprising a plurality of effectiveness elements and a level of achievement for each said effectiveness element and allowing quantification of a status of maintenance management practices;

determining a relative priority for taking action for each of said effectiveness elements using an element gap analysis wherein a higher priority is accorded to those effectiveness elements in which a gap between a current practice and a best practice is the largest;

determining at least one critical element for action based upon the relative priority for taking action; and

automatically generating recommendations for improving said maintenance management effectiveness for each of said critical elements.

2. A method in accordance with Claim 1 further comprising benchmarking at least one result of the method against comparable user operations.

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3. A method in accordance with Claim 1 further comprising generating an estimate of potential maintenance savings.

4. A method in accordance with Claim 1, wherein said diagnosis and said recommendations are output to a display means.

5. A method in accordance with Claim 5, wherein said display means is selected from the group consisting of a display monitor, a printer, an e-mail file and combinations thereof.

6. A method in accordance with Claim 1, wherein each of said steps is repeated over time to derive an assessment of overall improvements in maintenance management effectiveness with time.

7. A computerized method for diagnosing and defining actions for improvement in maintenance management comprising the steps of:

collecting data relating to maintenance usage and maintenance-related policies and practices in an automated data processing device;

using a defined set of characteristics for each of a plurality of levels of achievement to derive a diagnosis of maintenance management effectiveness, said diagnosis comprising a plurality of effectiveness elements and a level of

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achievement for each said effectiveness element and allowing quantification of a status of maintenance management practices;

determining a relative priority for taking action for each of said effectiveness elements using an element gap analysis, wherein a higher priority is accorded to those effectiveness elements in which a gap between a current practice and a best practice is the largest thereby defining at least one critical element;

determining at least one critical element for action;

automatically generating recommendations for improving said maintenance management effectiveness for each of said critical elements;

benchmarking at least one result of the method against comparable user operations; and

determining a level of progress for each of said plurality of effectiveness elements.

8. A method in accordance with Claim 7, wherein each of said steps is repeated over time to derive an assessment of overall improvements in maintenance management effectiveness with time.

9. A management system for maintenance performance improvement comprising:

means for collecting and storing data relating to maintenance usage and maintenance-related policies and practices;

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selecting a plurality of effectiveness elements from a group of management practices including: “demonstrated corporate commitment; “planning processes”; “awareness and training”; “maintenance operating budgets”; “operating procedures”; “maintenance procedures”; and “processes for auditing progress”;

means for deriving a diagnosis of maintenance management effectiveness using said collected and stored data, wherein said means for deriving a diagnosis includes using responses to a defined set of characteristics for each of the plurality of effectiveness elements and a level of achievement reached in each of the plurality of effectiveness elements;

ranking the plurality of effectiveness elements by determining a relative priority for taking action for each of said effectiveness elements using an element gap analysis wherein a higher priority is accorded to those effectiveness elements in which a gap between a current practice and a best practice is the largest thereby defining at least one critical element; and

means for automatically deriving recommendations for improving said maintenance management effectiveness.

10. A system in accordance with Claim 9, wherein said diagnosis comprises a plurality of effectiveness elements and a level of achievement for each of said effectiveness elements.

11. A system in accordance with Claim 9 further comprising means for generating an estimate of potential maintenance savings.

12. A system in accordance with Claim 10 further comprising means for determining a level of achievement for each of said effectiveness elements.

13. A computerized method for diagnosing maintenance management effectiveness and defining actions for improvement in maintenance management comprising the steps of:

collecting data relating to maintenance usage and maintenance-related policies and practices in an automated data processing device;

presenting a set of queried actions for each of a plurality of levels of achievement for each of a plurality of effectiveness elements;

using responses to the set of queried actions for each effectiveness element to prioritize the plurality of effectiveness elements to define at least one critical element, wherein the prioritization comprises an element gap analysis of each effectiveness element so that a higher priority is accorded to those effectiveness elements in which a gap between a current practice and a best practice is the largest;

diagnosing a maintenance management effectiveness for each effectiveness element wherein the level of achievement is defined by a user with

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respect to each effectiveness element, the user providing a priority to achievement of each effectiveness element;

providing an indication of effectiveness elements for which critical action is required; and

automatically generating recommendations for each effectiveness element regarding critical action to be taken for improving maintenance management.

14. A method in accordance with Claim 13 further comprising generating an estimate of potential maintenance savings upon achievement of the plurality of effectiveness elements.

15. A method in accordance with Claim 13 wherein the method is periodically repeated to compare newly obtained results with previous results to generate a progress report.

16. A method in accordance with Claim 15 wherein the element gap analysis for each effectiveness element comprises a determination of a gap between a current practice and a best practice for the effectiveness element.